

**MEMORANDUM OF UNDERSTANDING BETWEEN
THE UTAH DEPARTMENT OF TRANSPORTATION
AND
THE UTAH GEOLOGICAL SURVEY CONCERNING**

AGENCY RESPONSIBILITIES PURSUANT TO U.C.A. 63-73-19

This Memorandum of Understanding is entered into as of the effective date (as indicated by the latest signatory below) by and between the Utah Department of Transportation (UDOT) and the Utah Geological Survey (UGS).

WHEREAS, UGS is charged with maintenance of a State Paleontological Register listing sites and localities as prescribed by U.C.A. 63-73-18, and is responsible for the preservation and protection of those resources eligible for, or listed on, the State Register and designated State Landmarks; and

WHEREAS, the UDOT is responsible for constructing and maintaining a safe and effective transportation system, also including permitting encroachments onto the state highway right-of-way for the purpose of excavation, access construction, other incidental construction hereinafter referred to as "undertakings"; and

WHEREAS, pursuant to U.C.A 63-73-19 the UDOT must take into account any effects which undertakings might have upon a specimen eligible for inclusion, or, listed in the State Paleontological Register; and

WHEREAS, UDOT has determined that the agreement undertakings either do not have an effect on paleontological specimens and sites as defined by U.C.A. 63-73-1, or are repetitive, and are routinely found to have no known paleontological resources in the area of potential effects (APE);

NOW, THEREFORE, UDOT and the UGS agree as follows:

AGREEMENT

A. The UDOT and the UGS acknowledge that this agreement is applicable to all classes of undertakings, including encroachment on the UDOT right- of- way for excavation, access construction, or other incidental construction undertakings.

B. If the UDOT determines not to apply this agreement, the UDOT will comply with U.C.A 63-73-19 with regard to the undertaking.

C. The UDOT and the UGS agree that all undertakings shall be reviewed by qualified UDOT

persons to determine the applicability of this agreement. This evaluation will be conducted in all cases by UDOT archeological staff who meet or exceed the Secretary of the Interior's *Standards and Guidelines For Archaeology and Historic Preservation* (48 CFR 90), or by qualified consultant paleontologists that hold either a doctoral or master's degree in geology or biology with an emphasis in vertebrate paleontology.

D. The UDOT and the UGS agree the undertakings listed below have NO EFFECT on paleontological specimens that are on or eligible for inclusion in the State Paleontological Register and shall not therefore require individual UGS notification and concurrence:

1. CURB, GUTTER, AND SIDEWALK IMPROVEMENTS - Installations of curb, gutter, and sidewalk improvements are replacement and rehabilitation projects wherein no new terrain is altered. In all cases, projects of this category are in an urban environment where contemporary ground disturbance is complete.
2. LIGHTING AND SIGNALIZATION - These projects are most typically developed at intersections of highways where safety control is required. Installations include posts or towers for mounting lights which are supported by a concrete footer that extends six to eight feet into the ground in or adjacent to the already disturbed road prism.
3. INTERSECTION IMPROVEMENTS/MINOR WIDENING PROJECTS - Intersection improvements generally involve construction of turn lanes and may require acquisition of a minor amount of right-of-way (twenty feet or less), in areas previously disturbed by development. Minor widening projects on existing facilities may include minimal new right-of-way of no more than 20 ft, generally increasing travel lanes by 1 ft and shoulders by four to eight feet, in areas already previously disturbed.
4. RESURFACING PROJECTS - This type of project is confined to the existing pavement surface and is usually limited to addition of a new layer of asphalt or sand and oil mixture. However, wearing courses, rutting, and surface distortion may be removed. Shoulder flattening of no more than 5 ft and minor safety work may be included, in or out of areas previously disturbed.
5. IMPROVEMENT OF EXISTING RAILROAD CROSSINGS - This includes installations where the alignment of the highway intersects the alignment of a railroad at grade. All earth disturbance is confined to the already disturbed highway road prism.
6. GUARDRAIL INSTALLATION - This involves emplacing guardrail on curves and along steep embankments such as stream sides and cliff tops, and is necessary for safety and traffic control. Minor shoulder widening of no more than 5 ft in or out of previously disturbed areas may be included.
7. SIGNING - Projects of this type involve upgrading and installing regulatory or

advisory signing and railroad signs and devices, and is limited to disturbance for posts.

8. UTILITY RELOCATIONS - This activity involves water, gas, electrical, telephone, irrigation, storm, and sewer lines located in highway rights of way that are moved to previously disturbed areas to accommodate proposed highway upgrades.

9. MINOR CHANGES DURING CONSTRUCTION - Frequently, minor changes to highway improvement undertakings are necessary during construction after UGS consultation has been completed. This includes changes in cut and fill slopes, staging equipment areas, locating office sites, water storage ponds, and material stockpile locations. In all cases, the undertaking's APE has been inventoried for paleontological resources, and commitments to avoiding or mitigating specimens has been completed. All specimens requiring avoidance during construction have been fenced.

10. PERMITTED ENCROACHMENT UNDERTAKINGS - These include utilities and adjacent property owners requesting access via UDOT right of way. This applies to those undertakings which will be contained within previously disturbed right of way, or that do not require any excavation.

11. BICYCLE/PEDESTRIAN PATHWAYS - These projects involve construction of pathways by restriping existing transportation facilities with paint, and/or minor widening by the addition of a graded pathway no more than 5 ft beyond the edge of the existing traveling surface.

E. For undertakings that do have the potential for affecting paleontological specimens, the UDOT and the UGS agree that:

1. The UDOT and/or consultants shall submit a letter of request to the Office of the State Paleontologist which includes a description of the undertaking and its area of potential effects, a copy of the 7.5' U.S.G.S. (1:24,000 topographic) map showing the project location, and a request for a literature search for paleontological specimens or sites.

2. The UGS will respond in writing to requests submitted under stipulation E.1 within two weeks of receiving the written request.

3. The UDOT and UGS agree that individual review by the UGS under U.C.A. 63-73-19 is not required when:

- a. There are no potential fossil bearing formations in the project APE;

- b. Fossil bearing formations are present in the APE, but no field survey is required.

4. The UDOT and the UGS agree that individual UGS reviews under U.C.A. 63-73-19 are required, under the following conditions:

a. When the UGS responds in writing to requests submitted under stipulation E.1 above that fossil bearing formations are present in the APE, and a survey is required; and/or,

b. When there are known paleontological specimens in the APE.

F. The UDOT and the UGS agree that all paleontological inventories will be completed by personnel with either a doctoral or master's degree in geology or biology with an emphasis in vertebrate paleontology, and that all sites shall be recorded on the Paleontology form of the Intermountain Antiquities Computer System.

G. The intent of UDOT Standard Specification 104.15 will be enforced during all undertakings covered by this agreement. Specifically, upon discovery, construction operations shall be immediately stopped in the vicinity and the UDOT Project Engineer, or Region Permits Officer shall be verbally notified of the nature and exact locations of the findings. The Permittee shall not damage the discovered objects and shall provide written confirmation of the discovery to the above UDOT personnel within two (2) calendar days. If it is a UDOT sponsored undertaking, UDOT will consult with the UGS toward developing and implementing the appropriate treatment plan prior to resuming construction. If it is an Encroachment undertaking, the Encroachment Permittee will consult with the UGS regarding treatment, which UDOT will require prior to authorizing resuming construction.

H. Any party to this Agreement may terminate it by providing thirty days notice to the other party, provided that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. In the event of termination, the UDOT will comply with U.C.A 63-73-19 with regard to individual undertakings covered by this Agreement.

Execution of this agreement by the UDOT and the UGS, and implementation of its terms, evidences that the UDOT has taken into account the effect of undertakings on paleontological resources pursuant to U.C.A 63-73-19.d

UTAH DEPARTMENT OF TRANSPORTATION

BY: 

Clinton D. Topham, P.E., Deputy Director

Date: 2-12-98

UTAH GEOLOGICAL SURVEY

BY: 

M. Lee Allison, Director

Date: 1-30-98